

CLAIMS

1. Method for displaying graphical information on a display of an electronic device sized for hand-held use, said display providing an image in a window having an extent limited by the size of the electronic device, comprising
5 the steps of:

receiving an input windowing signal actuated by a user of said electronic device, said windowing signal having a magnitude indicative of a selected whole or portion of an extent of said graphical information greater than displayable at once as said image over said limited extent of said window, and

10 displaying said selected whole or portion of said extent of said graphical information on said limited extent window, in response to said user actuated input windowing signal.

2. The method of claim 1, wherein said graphical information has a given resolution available over said extent of said graphical information and wherein said step of displaying said whole or portion of said extent of said graphical information is at a resolution less than or equal to said given resolution.

3. The method of claim 1, further comprising the steps of:
20 receiving an input zoom signal actuated by said user of said electronic device, said input zoom signal having a magnitude indicative of a selected level of resolution, wherein said graphical information has a given resolution available over said extent of said graphical information greater than displayable at once in said window, and

25 displaying said selected level of resolution over a portion of said extent of said graphical information.

4. The method of claim 1, wherein said input windowing signal is provided in response to said user actuating a finger- or hand-actuated control
30 device associated with said electronic device.

5. The method of claim 4, wherein said control device includes one or more finger-actuable buttons or keys.

6. The method of claim 4, wherein said control device includes one or more finger-actuable rollers.

7. The method of claim 4, wherein said control devices includes one or more joysticks.

10 8. The method of claim 1, wherein said input windowing signal is provided in response to said user moving said electronic device.

9. The method of claim 8, wherein said moving includes moving said device with changing velocity.

10. The method of claim 8, wherein said moving includes moving said device with respect to a magnetic field.

11. The method of claim 8, wherein said moving includes moving with respect to sensible objects.

12. The method of claim 2, wherein said input windowing signal is provided in response to said user moving said electronic device.

13. The method of claim 12, wherein said moving includes moving said device with changing velocity.

14. The method of claim 3, wherein said input zoom signal is provided in response to said user moving said electronic device.

15. The method of claim 14, wherein said moving includes moving said device with changing velocity.

16. The method of claim 1, further comprising the step of displaying a stationary pointer on said limited extent window for use in selecting a link in its vicinity.

17. The method of claim 16, further comprising the step of receiving a user entered link selection signal for said selecting a link.

18. The method of claim 16, wherein said step of displaying comprises the step of changing a color or shape of said stationary pointer when in said vicinity of said link.

19. The method of claim 16, wherein said step of displaying is carried out only when link is positioned in said vicinity of said stationary pointer.

20. The method of claim 16, wherein said stationary pointer is positioned in a central position within said limited extent window.

21. Method for displaying graphical information on a limited extent display of a hand-holdable electronic device, comprising the steps of:

receiving inputs actuated by a user to indicate various selected levels of detail, wherein said graphical information has a level of detail over an extent greater than displayable at said level of detail over said limited extent display with a greatest level of detail available in said display, and

displaying said graphical information, in response to said inputs actuated by said user, in said various selected levels of detail over an increasingly lesser extent of said extent of said graphical information with increasingly greater levels of detail of said graphical information.

22. The method of claim 21, wherein said inputs actuated by said user comprise actuation of a finger-actuatable control device associated with said hand-holdable electronic device.

5 23. The method of claim 22, wherein said control device includes one or more buttons or keys.

24. The method of claim 22, wherein said control device includes one or more rollers.

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25. The method of claim 22, wherein said control device includes one or more joysticks.

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26. The method of claim 21, wherein said inputs actuated by said user include moving said hand-holdable electronic device.

27. The method of claim 26, wherein said moving includes the step of moving said hand-holdable device with changing velocity.

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28. The method of claim 21, further comprising the step of displaying a stationary pointer on said limited extent display for use in selecting a link in its vicinity.

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29. The method of claim 28, further comprising the step of receiving a user entered link selection signal for selecting a link.

30. The method of claim 28, wherein said step of displaying comprises the step of changing a color or shape of said stationary pointer when in said vicinity of said link.

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31. The method of claim 28, wherein said step of displaying is carried out only when link is positioned in said vicinity of said stationary pointer.

32. The method of claim 28, wherein said stationary pointer is positioned in a central position within said limited extent window.

33. Apparatus for displaying graphical information on a display of an electronic device sized for hand-held use, said display providing an image in a window having an extent limited by the size of the electronic device, comprising:

a user input device actuated by a user of said electronic device for providing a windowing signal having a magnitude indicative of a selected whole or portion of an extent of said graphical information greater than displayable at once as said image over said limited extent of said window, and

a signal processor, responsive to said windowing signal, for providing a display signal for displaying said selected whole or portion of said extent of said graphical information on said limited extent window.

34. The apparatus of claim 33, wherein said graphical information has a given resolution available over said extent of said graphical information and wherein said signal for displaying said selected whole or portion of said extent of said graphical information is at a resolution less than or equal to said given resolution.

35. The apparatus of claim 33, wherein said user input device actuated by said user of said electronic device is also for providing an input zoom signal having a magnitude indicative of a selected level of resolution, wherein said graphical information has a given resolution available over said extent of said graphical information greater than displayable at once in said window, and wherein said signal for displaying is also for displaying said selected level of resolution over said selected whole or portion of said extent of said graphical information.

36. The apparatus of claim 33, wherein said input windowing signal is provided in response to said user actuating a finger- or hand-actuated user input device.

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37. The apparatus of claim 36, wherein said user input device includes one or more finger-actuatable buttons or keys.

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38. The apparatus of claim 36, wherein said user input device includes one or more finger-actuatable rollers.

39. The apparatus of claim 36, wherein said user input devices includes one or more joysticks.

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40. The apparatus of claim 33, wherein said input windowing signal is provided in response to said user moving said electronic device.

41. The apparatus of claim 40, wherein said moving includes moving said electronic device with changing velocity.

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42. The apparatus of claim 34, wherein said input windowing signal is provided in response to said user moving said electronic device.

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43. The apparatus of claim 42, wherein said moving includes moving said electronic device with changing velocity.

44. The apparatus of claim 35, wherein said input zoom signal is provided in response to said user moving said electronic device.

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45. The apparatus of claim 44, wherein said moving includes moving said electronic device with changing velocity.

46. The apparatus of claim 33, wherein said signal processor is responsive to positioning of a hyperlink within said limited extent window for displaying a user actuatable pointer at a selected position within said limited extent window when said hyperlink is positioned at said selected position within said limited extent window.

47. The apparatus of claim 33, further comprising the step of receiving a user entered link selection signal for selecting a link.

48. The apparatus of claim 47, wherein said step of displaying comprises the step of changing a color or shape of said stationary pointer when in said vicinity of said link.

49. The apparatus of claim 47, wherein said step of displaying is carried out only when link is positioned in said vicinity of said stationary pointer.

50. The apparatus of claim 47, wherein said stationary pointer is positioned in a central position within said limited extent window.

51. Apparatus for displaying graphical information on a limited extent display of a hand-holdable electronic device, comprising:

means for receiving inputs actuated by a user for providing a user input signal having a magnitude indicative of various selected levels of detail, wherein said graphical information has a level of detail over an extent greater than displayable at said level of detail over said limited extent display with a greatest level of detail available in said display, and

means responsive to said user input signal, for providing a display signal for displaying said graphical information in said various selected levels of detail over an increasingly lesser extent of said extent of said graphical information with increasingly greater levels of detail of said graphical information.

52. The apparatus of claim 51, wherein said inputs actuated by said user comprise actuation of a finger-actuatable means for receiving user inputs.

5 53. The apparatus of claim 52, wherein said means for receiving user inputs includes one or more buttons or keys.

54. The apparatus of claim 52, wherein said means for receiving user inputs includes one or more rollers.

10 55. The apparatus of claim 52, wherein said means for receiving user inputs includes one or more joysticks.

56. The apparatus of claim 51, wherein said inputs actuated by said user include moving said hand-holdable electronic device.

15 57. The apparatus of claim 56, wherein said moving includes the step of moving said hand-holdable device with changing velocity.

20 58. The apparatus of claim 51, wherein said means responsive to said user input signal is also responsive to positioning of a hyperlink within said limited extent display for displaying a user actuatable pointer at a selected position within said limited extent display when said hyperlink is positioned at said selected position within said limited extent display.

25 59. The apparatus of claim 51, further comprising the step of receiving a user entered link selection signal for selecting a link.

30 60. The apparatus of claim 59, wherein said step of displaying comprises the step of changing a color or shape of said stationary pointer when in said vicinity of said link.

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61. The apparatus of claim 59, wherein said step of displaying is carried out only when link is positioned in said vicinity of said stationary pointer.

5 62. The apparatus of claim 59, wherein said stationary pointer is positioned in a central position within said limited extent window.

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